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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,698	03/17/2004	Hideki Kachi	P04881-US	1860

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EXAMINER
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TRAN, PABLO N

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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07/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/801,698	<b>Applicant(s)</b> KACHI ET AL.	
	<b>Examiner</b> Pablo N. Tran	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/17/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 recites the limitation "each of bearings". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 5, 8-9, 16, 19-20, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Adams et al. (7,023,909).

As per claims 1 and 16, Adams et al. disclosed an electronic device (fig. 2a/no. 210) for wireless communications removably fitted to an electronic apparatus (fig. 2a/no. 200) so as to provide the electronic apparatus with wireless communication functions, wherein the electronic device having a projecting section (fig. 2a, fig. 3a) fitted to said

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electronic apparatus with an end thereof projecting from said electronic apparatus, at least an antenna (fig. 2a/no. 220, fig. 3b/no. 360) arranged at said projecting section and electronically connected to a wireless circuit, and reflection means (fig. 4/no. 450) for shifting at least part of the radiating directions of a radio wave radiated from said antenna.

As per claims 5 and 20, Adams et al. disclosed the reflection means is integral with a housing covering a mounting baseboard (fig. 4).

As per claims 8 and 23, Adams et al. disclosed the reflection surface of said reflection means is provided with a large number of projections (fig. 4-9).

As per claim 9, Adams et al. disclosed the antenna is arranged on the mounting base board of said projecting section and located at a position higher than a circuit mounting region where said wireless circuit is mounted (fig. 2-3).

As per claim 19, Adams et al. disclosed the reflection means can be drawn from the electronic apparatus with a slid structure thereof (fig. 2).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 11-13, 15, 25-27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Rohon et al. (JP JP411053498A).

As per claims 11 and 25, Rohon et al. disclosed a reflector device (fig. 1/no. 9) for use in a wireless communication card (fig. 1/no. 1) having a base portion which has an attachment portion attached to the wireless communication card and a reflector which is rotatably attached to the base portion through a movable supporting portion and which reflects a radio wave (fig. 1).

As per claims 12 and 26, Rohon et al. disclosed the reflector is supported by said movable supporting portion with the reflector being freely capable of rising and falling (fig. 1).

As per claims 13 and 27, Rohon et al. disclosed a reflection surface of said reflector is formed by a planar surface (fig. 1).

As per claims 15 and 29, Rohon et al. disclosed one projection is formed in a surface of said reflection surface of said reflector device (fig. 1).

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (7,023,909).

As per claim 7 and 22, Adams et al. do not explicitly taught the reflection surface is curved so as to be convex or concave. However, such reflection surface is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to at the time of invention for Adams et al. to utilize a convex or concave reflection surface to effective directing the radio wave in the desire direction while avoiding the influence of multi-path.

9. Claims 14 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohon et al. (JP JP411053498A).

As per claim 14 and 28, Adams et al. do not explicitly taught the reflection surface is a curved surface. However, such reflection surface is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to at the time of invention for Adams et al. to utilize a curved reflection surface to effective directing the radio wave in the desire direction while avoiding the influence of multi-path.

10. Claims 2-3, 6, 10, 17-18, 21, 24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (7,023,909) in view of Rohon et al. (JP411053498A).

As per claims 2, 10, 17, and 24, Adams et al. disclosed a fixed reflector and not a movable reflector. Rohon et al. teach such modem having a movable reflector (fig. 1/no. 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention for Adams et al. to utilize the modem of Rohon et al. to avoid the influence of multi-path.

As per claims 3, 18, and 30, as stated above in claim 1, the modified modem apparatus Adams et al. and Rohon et al. further disclosed the reflection means can be made to change positions thereof from a first position capable of reflecting the radio wave radiated from said antenna to a second position incapable of reflecting the radio wave (see Rohon et al., fig. 1, where it is clear that the reflector can move along the guide 6).

As per claims 6 and 21, the modified modem apparatus Adams et al. and Rohon et al. further disclosed the said reflection means can swing in any direction around a pivot formed as a result of engagement of a spherical projection and a spherical recess (see Rohon et al., fig. 1).

***Allowable Subject Matter***

11. Claim 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pablo Tran

Primary Examiner



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June 23, 2007